

IN THE SPECIFICATION:

Please amend the Specification as follows.

In the Title:

Please amend the title of the application as follows:

DATA TRANSMISSION METHOD, SYSTEM, BASE STATION, AND
SUBSCRIBER STATION, DATA PROCESSING UNIT, COMPUTER PROGRAM
PRODUCT, COMPUTER PROGRAM DISTRIBUTION MEDIUM AND BASEBAND
MODULE

In the written description, please amend paragraph 0006 as follows:

[0006] The invention provides an improved data transmission method, a system, a base station, and a subscriber station, a data processing unit, a computer program product, a computer program distribution medium, and a baseband module. According to an embodiment of the invention, there is provided a data transmission method in a communication system, the system including at least one base station and at least one subscriber station, which subscriber station allocates capacity for connections. The method includes first transmitting from a subscriber station at least one capacity request message, granting a capacity subscriber station-specific by a base station, second transmitting at least one capacity grant message from the base station, allocating granted capacity connection-specific by the subscriber station, third transmitting from the subscriber station at least one message wherein the at least one message includes information based on previous capacity requests, fourth transmitting data from the

subscriber station according to a capacity allocation, and monitoring by the base station on capacity request messages, capacity grant messages and received transmissions.

Please insert the following paragraphs after paragraph [0014]:

[0014.01] According to another embodiment of the invention, there is provided a data transmission method. The method includes receiving capacity request messages; granting capacity subscriber station-specifically; transmitting at least one capacity grant message; and monitoring at least one of capacity request messages, capacity grant messages and received transmissions.

[0014.02] According to another embodiment of the invention, there is provided a data transmission method. The method includes transmitting capacity request messages of at least one connection; receiving capacity grant messages from a base station; connection-specifically allocating the capacity granted by the base station; transmitting messages, wherein the messages comprise information based on previous capacity requests; and transmitting data according to the capacity allocation.

[0014.03] According to another embodiment of the invention, there is provided a data transmission method. The method includes transmitting capacity request messages of at least one connection; grouping connections into predetermined communication groups; scheduling the connections based on the predetermined communication groups, a predetermined group priority order and a capacity granted by a base station; transmitting messages, wherein the messages comprise information based on previous capacity requests; and transmitting data according to a connection scheduling.

[0014.04] According to another embodiment of the invention, there is provided a data processing unit. The unit includes: means for receiving capacity request messages; means for granting capacity subscriber station-specifically based on the received capacity request messages; means for generating at least one capacity grant message; and means for monitoring at least one of capacity request messages, capacity grant messages and received transmissions.

[0014.05] According to another embodiment of the invention, there is provided a data processing method. The method includes receiving capacity request messages; granting capacity subscriber station-specifically based on the received capacity request messages; generating at least one capacity grant message; and monitoring at least one of capacity request messages, capacity grant messages and received transmissions.

[0014.06] According to another embodiment of the invention, there is provided a data processing unit. The unit includes: means for generating capacity request messages of at least one connection; means for receiving capacity grant messages; means for connection-specifically allocating the capacity granted in the received capacity grant messages; and means for generating messages, wherein the messages comprise information based on previous capacity requests.

[0014.07] According to another embodiment of the invention, there is provided a data processing method. The method includes generating capacity request messages of at least one connection; receiving capacity grant messages; connection-specifically allocating the capacity granted in the received capacity grant messages; and generating

messages, wherein the messages comprise information based on previous capacity requests.

[0014.08] According to another embodiment of the invention, there is provided a data processing unit. The unit includes: means for transmitting capacity request messages of at least one connection; means for grouping connections into predetermined communication groups; means for scheduling the connections based on the predetermined communication groups, a predetermined group priority order and a capacity granted by a base station; means for transmitting messages, wherein the messages comprise information based on previous capacity requests; and means for transmitting data according to a connection scheduling.

[0014.09] According to another embodiment of the invention, there is provided a computer program product encoding a computer program of instructions for executing a computer process for a data transmission method. The process includes receiving capacity request messages; granting capacity subscriber station-specifically; generating at least one capacity grant message; and monitoring at least one of capacity request messages, capacity grant messages and received transmissions.

[0014.10] According to another embodiment of the invention, there is provided a computer program distribution medium readable by a computer and encoding a computer program of instructions for executing a computer process for a data transmission method. The process includes receiving capacity request messages; granting capacity subscriber station-specifically; generating at least one capacity grant message;

and monitoring at least one of capacity request messages, capacity grant messages and received transmissions.

[0014.11] According to another embodiment of the invention, there is provided a computer program product encoding a computer program of instructions for executing a computer process for a data transmission method. The process includes generating capacity request messages of at least one connection; receiving capacity grant messages; connection-specifically allocating the capacity granted in the capacity grant messages; and generating messages, wherein the messages comprise information based on previous capacity requests.

[0014.12] According to another embodiment of the invention, there is provided a computer program product encoding a computer program of instructions for executing a computer process for a data transmission method. The process includes transmitting capacity request messages of at least one connection; grouping connections into predetermined communication groups; scheduling the connections based on the predetermined communication groups, a predetermined group priority order and a capacity granted by a base station; transmitting messages, wherein the messages comprise information based on previous capacity requests; and transmitting data according to a connection scheduling.

[0014.13] According to another embodiment of the invention, there is provided a computer program distribution medium readable by a computer and encoding a computer program of instructions for executing a computer process for a data transmission method. The process includes generating capacity request messages of at

least one connection; receiving capacity grant messages; connection-specifically allocating the capacity granted in the capacity grant messages; and generating messages, wherein the messages comprise information based on previous capacity requests.

[0014.14] According to another embodiment of the invention, there is provided a computer program distribution medium readable by a computer and encoding a computer program of instructions for executing a computer process for a data transmission method. The process includes transmitting capacity request messages of at least one connection; grouping connections into predetermined communication groups; scheduling the connections based on the predetermined communication groups, a predetermined group priority order and a capacity granted by a base station; transmitting messages, wherein the messages comprise information based on previous capacity requests; and transmitting data according to a connection scheduling.

[0014.15] According to another embodiment of the invention, there is provided a baseband module. The module includes: means for receiving capacity request messages; means for granting capacity subscriber station-specifically based on capacity request messages; means for generating at least one capacity grant message; means for monitoring at least one of capacity request messages, capacity grant messages and received transmissions

[0014.16] According to another embodiment of the invention, there is provided a baseband module. The module includes: means for generating capacity request messages of at least one connection; means for receiving capacity grant messages; means for connection-specifically allocating the capacity granted in the capacity grant messages;

and means for generating messages, wherein the messages comprise information based on previous capacity requests.

[0014.17] According to another embodiment of the invention, there is provided a baseband module. The module includes: means for transmitting capacity request messages of at least one connection; means for grouping connections into predetermined communication groups; means for scheduling the connections based on the predetermined communication groups, a predetermined group priority order and a capacity granted by a base station; means for transmitting messages, wherein the messages comprise information based on previous capacity requests; and means for transmitting data according to a connection scheduling.